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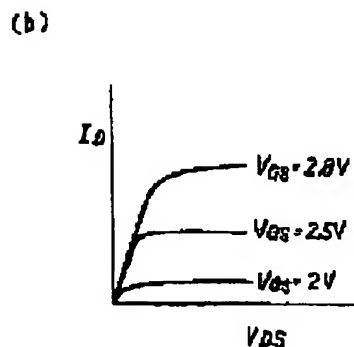
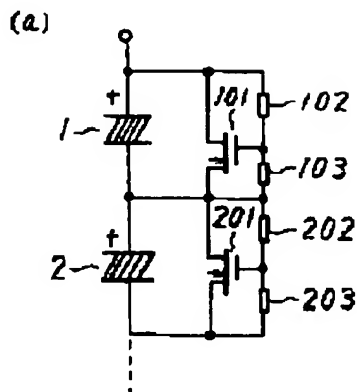
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APPLICATION NUMBER : 04106310

APPLICANT : TOSHIBA CORP;

INVENTOR : OKATSUCHI CHIIHIRO;

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TITLE : VOLTAGE DIVISION CONTROLLER
FOR CAPACITOR



ABSTRACT : PURPOSE: To activate the controller effectively in the state of voltage unbalance only and to reduce power consumption when the voltage is balanced by providing a transistor(TR) conductive when a voltage across a capacitor exceeds a setting voltage so as to balance the shared voltage of each capacitor.

CONSTITUTION: MOSFETs 101, 201 are respectively connected in parallel with capacitors 1, 2 connected in series and voltage division resistors 102 and 103, and 202 and 203 are connected and their divided voltage is fed respectively to gates of the MOSFETs 101, 201. In this case, the voltage division ratio by the voltage division resistors is set so that the MOSFETs start conduction when the voltage across the capacitor exceeds its rating voltage. When a voltage across an optional capacitor exceeds the setting voltage due to unbalance, the TR is conductive to discharge the charge in the capacitor so as to balance the voltage share and when the voltage across the capacitor is less than the setting voltage, the TR is nonconductive and no power loss is caused. Thus, when the capacitor is used in place of a battery, a voltage holding time is extended.

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